

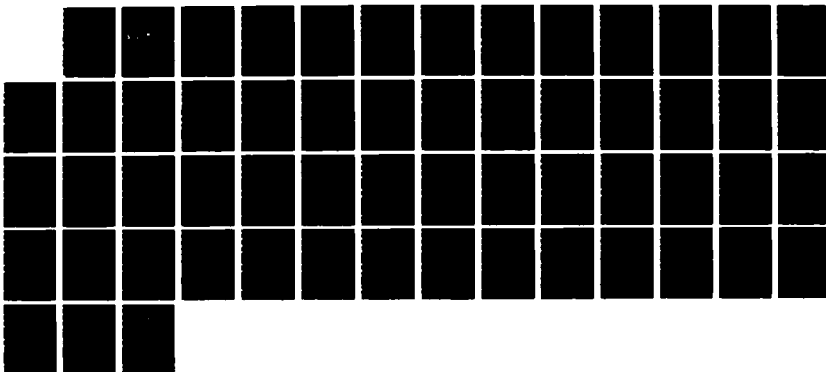
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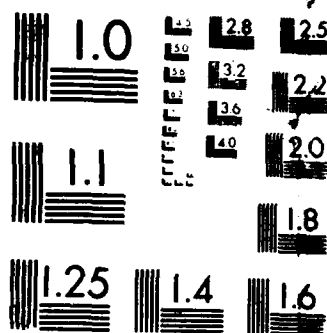
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EFFECTS OF CHANGES IN CONGRESSIONAL
COMMITTEE/SUBCOMMITTEE STRUCTURE
ON FEDERAL EXPENDITURES

by

Paul R. Recker

December 1987

Thesis Advisors:

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Effects of Changes in Congressional
Committee Subcommittee Structure
on Federal Expenditures

by

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Submitted in partial fulfillment of the
requirements for the degree of

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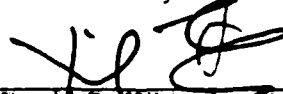
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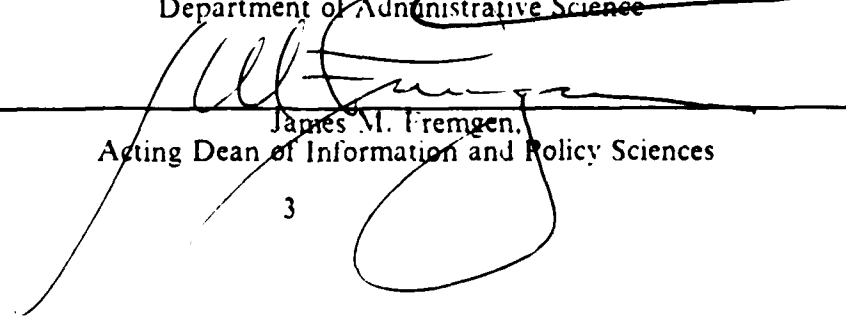

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ABSTRACT

This thesis examines the role of the legislative structure in explaining the growth of federal government spending. The legislative structure of Congress is defined in terms of the size, number, and partisanship of congressional committees and subcommittees. An econometric model is used to correlate and assess archival data from the years 1961 through 1984. Archival data is broken down by functional expenditure area (dependent variable), by committees and subcommittees which addressed specific functional areas, by the numbers of senators or representatives sitting on the respective committees and subcommittees, and by the averaged Democratic proportion of the membership on the committees and subcommittees in the corresponding functional area. The model estimates the effect of structural and other, non-structural, variables (e.g. percentage change in unemployment and real national income) on the percentage change in functional expenditures over time. This thesis concludes that legislative structure plays a statistically insignificant role in explaining the growth of federal spending.

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I. INTRODUCTION

A. BACKGROUND

Congressional legislative action or inaction is the means by which public and private concerns become public policy.¹ The budget is the catalyst by which public policy is translated into governmental and public activity. This activity supports or is in itself the essence of public policy. In a broad sense, the extent to which public policy reflects political issues and concerns can be inferred from the proportion of the budget allocated to functional areas, e.g. national defense, agriculture, and income security. Aaron Wildavsky states that, among its other contexts, the federal budget "Taken as a whole...is a representation in monetary terms of governmental activity." [Ref. 1]

Revenue generation kept pace with budgetary outlays until the late 1950s when federal deficits became routine (see Table 1).² The continuing growth in annual federal deficits was noted with particular concern by taxpayers because of the implications for future tax increases and the growing national debt legacy being passed on to future generations. These concerns led to pressure for control of and eventual reduction in the federal deficit, resulting in the passage of the Gramm-Rudman-Hollings Bill in 1985. The relative ineffectiveness of this bill in 1986 gave rise to new concerns over how to control federal spending and the imbalance in the budget.

B. OBJECTIVES

The objectives of this thesis are to address those factors that may be significant in explaining the recent rise in federal deficit spending and to determine whether specific relationships exist which may be used in developing other measures for the control of deficit spending. In particular, the thesis examines the role of the legislative structure in explaining the growth of federal government spending.

¹Consideration of some public concerns, e.g. the declaration of National Prayer Day, and most private concerns, e.g. the receipt of an award or some form of recognition, are generally disregarded in the consideration of legislative action because they seldom affect individuals, families, or organizations after the event and rarely involve significant expenditures.

²Includes outlays (and deficits) that are off-budget under current law and proposed to be included on-budget. These transactions began in 1973.

TABLE 1
BUDGET RECEIPTS AND OUTLAYS, 1951-1987
(IN MILLIONS OF DOLLARS)

Fiscal Year	Budget Receipts	Budget Outlays	Surplus Or Deficit (-)
1951	51,616	45,514	6,102
1952	66,167	67,686	-1,519
1953	69,608	76,101	-6,493
1954	68,701	70,855	-1,154
1955	65,451	68,444	-2,993
1956	74,587	70,640	3,947
1957	79,990	76,578	3,412
1958	79,636	82,405	-2,769
1959	79,249	92,098	-12,849
1960	92,492	92,245	247
1961	94,388	97,723	-3,335
1962	99,676	106,821	-7,146
1963	106,560	111,316	-4,756
1964	112,613	118,528	-5,915
1965	116,817	118,228	-1,411
1966	130,835	134,532	-3,698
1967	148,822	157,464	-8,643
1968	152,973	178,134	-25,161
1969	186,882	183,640	3,242
1970	192,812	195,649	-2,837
1971	187,139	210,172	-23,033
1972	207,309	230,681	-23,373
1973	230,799	245,707	-14,908
1974	263,224	269,359	-6,135
1975	279,090	332,332	-53,242
1976	298,060	371,779	-73,719
TQ*	81,232	95,973	-14,747
1977	355,559	409,203	-53,644
1978	399,740	458,729	-58,989
1979	463,302	503,464	-40,161
1980	517,112	590,920	-73,808
1981	599,272	678,209	-78,936
1982	617,766	745,706	-127,940
1983	600,562	808,327	-207,764
1984	666,457	851,781	-185,324
1985	734,057	946,323	-212,266
1986 est	777,139	979,928	-202,789
1987 est	850,372	994,002	-143,630

* In calendar year 1976, the Federal fiscal year was converted from a July 1-June 30 basis to an Oct. 1-Sept. 30 basis. The TQ refers to the transition quarter from July 1 to Sept. 30, 1976.

Note: Table data obtained from [Refs. 2,3].

C. RESEARCH QUESTIONS

In line with the objectives above, the primary research question focuses on whether a relationship exists between expenditure growth at the federal level and changes in committee and subcommittee structure in the U. S. Congress. The institutional structure of Congress will be defined in terms of the size, number, and partisanship of congressional committees and subcommittees. Thus, the research will address the questions of whether a membership change or change in the number of committees or subcommittees responsible for a specific functional area has any bearing on the overall growth in federal expenditures. In addition, the research will examine whether committee partisanship has any significant effect on spending.

Subsidiary questions include:

1. Does increased "specialization" (i.e. increasing the number of committees and subcommittees addressing a specific functional area) lead to greater spending or to better monitoring of agency activities, *ceteris paribus*?
2. Is the net effect of increased size of the committees and subcommittees:
 - a. reduced expenditures because of lower preferences of the median member, or
 - b. increased expenditures because of greater ability to represent special interest groups?

D. SCOPE AND METHODOLOGY

An econometric model is used to correlate and assess archival data from the years 1961 through 1984. The analysis is limited to 12 functional expenditure groupings, the corresponding structural variables, and to other potential explanatory variables such as gross national product and unemployment.

Archival data was broken down by functional expenditure area, by committees and subcommittees which addressed specific functional areas, by the numbers of senators or representatives sitting on the respective committees and subcommittees, and by the averaged Democratic proportion of the membership on the committees and subcommittees in the corresponding functional area.

E. ORGANIZATION

The thesis develops with a literature review and discussion (Chapter Two), which provides the groundwork for model and data discussion (Chapter Three), subsequent analysis of the model results (Chapter Four), and conclusions and summary remarks (Chapter Five).

II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A. INTRODUCTION

The literature review addresses five areas: (1) the structure of the legislative process; (2) an analysis of the role of the legislator; (3) the party leaderships' control of individual legislator's voting patterns through incentives (based on an analysis of final voting on legislation); (4) a brief economic analysis of political decision making; and, (5) a review of the efforts to curb pro-spending bias. The discussion that follows briefly summarizes the literature and provides the framework for a structural analysis of the legislative process.

B. LITERATURE REVIEW

1. The Legislative Process, An Institutionalized Environment

The legislative process is straightforward. A primary source of public bill proposals is the executive branch, i.e. the President's State of the Union address and agency proposals. The introduction or sponsoring of the bill must be by a House member or by a Senator.

A bill is referred to the appropriate committee by a House parliamentarian on the Speaker's order, or by the Senate president. Sponsors may indicate their preferences for referral, although custom and chamber rule generally govern....Failure of a committee to act on a bill is equivalent to killing it; the measure can be withdrawn from the group's purview only by a discharge petition signed by a majority of the House membership on House bills, or by adoption of a special resolution in the Senate. Discharge attempts rarely succeed....The committee chairman may assign the bill to a subcommittee for study and hearings, or it may be considered by the full committee. ...A subcommittee, after considering a bill, reports to the full committee its recommendations for action and any proposed amendments. The full committee then votes on its recommendation to the House or Senate....When a committee sends a bill to the chamber floor, it explains its reasons in a written statement, called a report, which accompanies the bill....Usually, the committee "marks up" or proposes amendments to the bill....The chamber must approve, alter, or reject the committee amendments before the bill itself can be put to a vote.³ [Ref. 4: p. xxv]

³For a more complete discussion see [Refs. 5,6,7].

Once passed within one chamber, the bill is referred to the other chamber. Differences between the chambers regarding a specific bill are disposed of through compromise in conference committees. When approved by both chambers, the bill is sent in its final form to the President for signature into law. A Presidential veto requires a two-thirds overriding vote within both chambers.

The legislative process is complicated by procedures, policies, and precedents that have built up over time as expedient measures for handling bills of varying complexity and controversy. W. J. Oleszek comments,

Congressional procedures are employed to define, restrict, or expand the policy options available to members during floor debate. They may prevent consideration of certain issues or presage policy outcomes....such tightly structured procedures enhance the policy influence of certain members, committees, or party leaders; facilitate expeditious treatment of issues; grant priority to some policy alternatives but not others; and determine, in general, the overall character of policy decisions. [Ref. 6: p. 9]

Procedural expertise within this institutionalized legislative environment has a significant influence on political outcomes. Oleszek notes,

Members who know the rules will always have the potential to shape legislation to their ends and to become key figures in coalitions trying to pass or defeat legislation....Those who do not understand the rules reduce their proficiency and influence as legislators. [Ref. 6: p.10]

2. Focus on the Legislator

Aaron Wildavsky provides some insightful discussion of the legislative process in committee and subcommittee action [Ref. 1]. The legislator faces the institutionalized legislative environment within which he must learn to operate proficiently and a voting framework characterized by various commitments that he made to his constituency. He also faces a plethora of other factors which influence the way he votes.

a. Budgetary Perspective

Budgetary perspective provides the framework which governs budgetary impetus during legislative considerations. The substance of most legislation relies on the budgetary backing provided. The determination of budgetary support (i.e. how much, the extent to which it or parts of it are "fenced",⁴ other restrictive verbiage, the

⁴To "fence" in budgetary terms is to assign dollar limits, threshold or ceiling, to spending authorizations or appropriations.

consideration of other functional area and/or national priorities, etc.) is strongly influenced by the budgetary perspective of the individual legislator. Budgetary perspective has significance in both the formulation and execution of legislation. Some examples of perspective are:

- the *economic perspective* wherein the budget acts as the "mechanism for making choices among alternative expenditures" [Ref. 1: p. 2] and provides a broad national overview which may reject legislation on the grounds of greater expenditure needs in other functional areas.
- the *efficiency perspective* wherein the budget seeks "the most policy returns for a given sum of money" [Ref. 1: p. 2] or the lowest cost to obtain desired objectives. Because the legislator routinely addresses intra-functional area concerns, policies, and objectives, this perspective tends to be parochially biased. Although normally considered, national objectives and priority spending considerations in a limited national resources environment are largely ignored.
- the *socio-legal perspective* wherein the budget becomes a contractual and behavioral establishing link between financial resources and the human behavior necessary to carry out public policy. The constraints of resource availability and efficiency or effectiveness have no bearing.

Chairmen strongly influence their respective committees and subcommittees in their consideration of legislation and its budgetary support. The direction each chairman provides is imbued with his budgetary perspective.

b. The Politicized Legislative Environment

Political factors constrain the legislative process and alter the social infrastructure. The social framework determines the role each legislator assumes as well as the operative rules that govern his "membership" and activities.

All participants face the usual overt political factors involving group pressures, relationships between Congressmen and their constituents, political party conflicts, executive-legislative cooperation and rivalry, inter-agency disputes, and the like. Sooner or later the participants go through a process of socialization in the kinds of roles they are expected to play. They come to know the rules of the budgetary game, which specify the kinds of moves that are and are not permissible for them to make. [Ref. 1: p. 6]

c. A Calculation Dilemma

After mastering his role and the rules of the budgetary game, the legislator faces the two-fold problem that Wildavsky refers to as the calculation problem.⁵ The first aspect

⁵"By 'calculation' (he) means the series of related factors (manifestly including perceptions of influence relationships) which the participants take into account in determining the choice of competing alternatives. Calculation involves a study of how problems arise, how they are identified as such, how they are broken down into

is that of the complexity of the issues faced within a bill or program, issues that specialists in the field frequently do not agree on or adequately explain. The second aspect is the difficulty of making value assessments, such as a return on the allocated dollar (i.e. the efficiency perspective) or the potential contribution from each of the areas competing for the same program or functional dollar (i.e. the economic perspective).

Aside from the complexity of individual budgetary programs, there remains the imposing problem of making comparisons among different programs that have different values for different people [Ref. 1: p. 10].

Wildavsky suggests that legislators use four aids to calculation in dealing with complex or particularly large problems:

1. The *experiential approach* starts with a rough best estimate to work with while experience accumulates. Modifications are then made as difficulties are encountered or as growing experience dictates (examples of this approach are the Korean war build-up and various disaster relief programs).
2. The process of *simplification* wherein complexity is handled by use of simpler items or actions as surrogate indices. Wildavsky notes that the validity of such abdication on complex issues rests in the use of the surrogates as a "testing device, (when) and if there is a reasonable connection between the competence shown in handling simple and complex items."⁶ [Ref. 1: p. 12]
3. The concept of *satisficing* (satisfy and suffice) wherein one lowers expectations from the best of all possible worlds to that which is merely sufficient to meet the lowest thresholds of accomplishment. One need not and, in fact, can not achieve all things with style in a limited resources environment. It is merely enough to "get by" or "make do" so that more program needs can be met.
4. The concept of *incremental budgeting* wherein "...the largest determining factor of the size and content of this year's budget is last year's budget. Most of the budget is the product of previous decisions.... (The budget) is almost never actively reviewed as a whole every year in the sense of reconsidering the value of all existing programs as compared to all possible alternatives....the men who make the budget are concerned with relatively small increments to an existing base."⁷ [Ref. 1: pp. 13,15]

manageable dimensions, how they are related to one another, how determinations are made of what is relevant, and how the actions of others are given consideration." [Ref. 1: p. 7]

⁶A related method is to examine the performance and knowledge of responsible administrative officials. If the responsible officials are knowledgeable and poised in responding to questions in any area of their program, it is reasonable to assume that the program is not out of control. Even a subjective measure of a program's efficiency and effectiveness can be answered, if not quantified, to some extent.

In addition to an established base, an agency can expect to receive a "fair share" of any budget increase or decrease that is made in a given year. The legislator has little time for an intensive review of an agency's complete budget when the complexity of issues and the effort to assess the relative value both within and among programs consumes so much of his time and energy.

3. Partisanship and the Legislator (Incentives and Penalties)

Mark Crain, Donald R. Leavens, and Robert D. Tollison (hereafter referred to as CLT) look at the "role of floor voting from the standpoint of legislator organization and control." [Ref. 8: p. 833] They look at the timing and sequence of final votes as a measure of ease of passage and of incentive (reward). The more senior and party-oriented legislators are rewarded with earlier consideration of their bills and with less political friction. CLT touch on other research that has

focused on the relative impact of economic vs. ideological influences on congressional voting behavior (wherein) the way that legislators vote on proposed legislation is modeled as a function of the preferences of various economic and ideological interests groups, including the legislator's own preferences for wealth and ideology. (CLT fault the research for ignoring the fact that legislatures, as a whole, are) costly and imperfect organizations for generating political influences. [Ref. 8: p. 833]

The shortcomings noted in this research can be partially explained in the development of the role and social infrastructure previously noted in Wildavsky's work. Where CLT fall short in dismissing this research on the relative impact of economic vs. ideological influences is in the assumption that special interest groups must address a large proportion of the legislatures to be effective in generating political influence. Securing the political influence of a majority in the respective subcommittees and committees that address specific legislation may be sufficient to effect full legislation or an amendment to a non-related but heavily favored bill. Legislatures may be imperfect organizations for generating widespread political influence, but successful lobbying may require only that one influence a subcommittee chairman.

"As a product of previous decisions, "...the base is the general expectation among the participants that programs will be carried on at close to the going level of expenditures but it does not necessarily include all activities. Having a project included in the agency's base thus means more than just getting it in the budget for a particular year. It means establishing the expectation that the expenditure will continue, that it is accepted as part of what will be done, and therefore, that it will not normally be subjected to intensive scrutiny." [Ref. 1: p. 17]

Team production principles and the party loyalty filtering process are inherent in the nature of collective decision making.

Deals are negotiated during the legislative session among legislators, the leadership, and interest groups. Once it is clear that these "markets" have cleared, the leadership must arrange final votes to consummate each deal [Ref. 8: p. 834].

A legislator's credibility with his party influences both the timing of the vote on his bill and the probable success of its passage. Party credibility is lost when a legislator 'reneges' on negotiated deals; for example, changing his vote from what was agreed or departing the "Hill" after the vote on his bill, but before votes on subsequent bills. Party leadership *encourages* party line compliance and deal negotiation and *discourages* 'reneging' by rewarding within the committee system and through the recognition of seniority. The primary incentives used are assignments to superior committee positions and the assurance of earlier and more certain passage of sponsored bills. "The legislature will be a more effective organization the more closely rewards are tailored to individual legislator productivity⁸ [Ref. 8: p. 834]." Party leadership has *incentivized* the legislative process in their efforts to control and organize party legislators.

CLT touch on three other theories which warrant attention:

1. The *political power* theory hypothesizes the same earlier and easier passage of a party supporter's bills, but the emphasis is on the more "powerful" legislator rather than on an incentive structure. Its shortcoming is the simultaneity problem, from whence the "power" arises.
2. The *legislative capital framework* focuses on the accumulation of political capital. Such capital is generated by legislative competence which, in turn is related to seniority. The combination leads to earlier and easier passage of the legislator's bills. Again the simultaneity problem arises between the accumulation of political capital and the development of legislative competence, which together lead to reelection and greater seniority.
3. The *bargaining power* theory reverses the sequence of bill consideration. It suggests that "returns are greatest by waiting the longest, and if this is so, the bills of the most senior and powerful legislators should be voted on last." [Ref. 8: p.835] This argues for an ineffective process, since all bills cannot be considered and passed at the end.

The bargaining power theory is the weakest of the theories presented. CLT conclude that reward structure and seniority recognition are critical elements in party leadership's control of individual legislators.

⁸CLT define individual legislator productivity as "the propensity of a legislator to keep his political bargains." [Ref. 8: p. 834]

4. An Economic Analysis Approach

Glahe and Lee [Ref. 9] draw some interesting conclusions in their chapter on economic analysis:

- Political behavior is motivated largely by *self-interest*. Politicians are motivated to act on voting behavior information because of the potential impact of voters' behavior on their reelections. The more distant their positions are from that of the median voter, the more likely a political opponent's position falls between their's and the median voters', and the more likely they are to fail to be reelected.
- Efficient political decisions require much more information than market decisions because many more people may be affected, not just the few individuals involved in a market decision. When more people are affected, information on "consumers' choice" is much more difficult and costly to obtain. The consequence of reduced information and its high cost is a large number of *inefficient political decisions*.
- *Voter apathy* occurs because "there is little connection between the political decisions individual voters make and the political actions that are actually executed." [Ref. 9: p. 542] The voter's cost of being politically informed is far greater than the expected return on his voting decision.
- *Special-interest groups* form when political issues motivate individuals to become politically informed and active. Although a small minority of the voting public, these groups can exert sufficient influence to have legislation passed that will benefit them at the expense of the majority. "...much political action is motivated by the opportunity the political process provides for one group to create and take advantage of a negative externality (i.e. the imposition of an uncompensated cost on other groups). Activities that generate negative externalities in political markets, as in private markets, tend to be excessively funded." [Ref. 9: p. 542]

In a final parting shot, the authors state:

Political decision making will generally be less responsive to voters than market decision making will be to consumers. The result is that negative externalities (which often cause market failure) almost always accompany political action. These politically generated externalities not only cause inefficiencies, but they also explain the motivation behind much political action. The opportunity that the political process affords to special-interest groups to reap rewards by imposing uncompensated costs on the general public is a common feature of politics and nearly always leads to inefficiencies. [Ref. 9: p. 544]

5. In Pursuit of Fiscal Responsibility

General disgust with the blatant use of legislative action and non-legislative maneuvering in the pursuit of individual goals was a major impetus in the passage of

the Congressional Budget and Impoundment Act (Public Law 93-344) in 1974. At the time, there were no restraints on voting for spending and few were willing to vote for corresponding tax increases to cover the spending. When legislators could not gain their spending ends through the appropriations committees, they resorted to "off-budget" spending, i.e.

direct drafts on the Treasury ("backdoor spending"),...(end-runs) through tax expenditures (spending that allows certain people to reduce their taxes before these taxes get to the Treasury),...loans and loan guarantees, which, except for defaults, do not count in the budget as direct spending. Individual members of Congress won but Congress as a whole lost; individual and collective rationality were at odds. [Ref. 1: p. 223]

The Congressional Budget and Impoundment Control Act of 1974, inter alia, did much in subsequent years to control the rampant off-budget spending that was typical of prior years. It did not, however, address the more significant problem of the lack of restraints on voting for spending which was in excess of an amount indexed to the percent of growth in GNP. Political repercussion is critical when a proposed increase in a functional area is greater than the respective proportion of an aggregate increase indexed to the percent of GNP growth in the previous year. An example of political repercussion may be the requirement to offset an approved (voted in) authorization or appropriation that exceeds the budget approved in the First Resolution with an equivalent reduction elsewhere within the budget. This example could be modified to require an offset greater by a predetermined percentage to be applied directly toward annual deficit or national debt reduction.

Despite the restraints of the 1974 control act, expenditure growth continued to generate annual deficits. Wildavsky notes:

two seemingly automatic processes (that have encouraged this growth in federal spending): revenues under a progressive income tax rise faster than inflation, while important transfer programs, such as Social Security, index benefits to the price level. The seemingly natural rise in revenues frees Congressmen from voting for tax increases to fund spending growth. Indexing of benefits helps ensure that recipients maintain their share of total product. [Ref. 1: p. 253]

Until the personal income tax structure became indexed to inflation in 1985 as a result of the Economic Recovery Tax Act of 1981 [Ref. 10: pp. 118-120], progressive tax creep increased national revenues without the need for congressional intervention to fund spending sprees. Restrictions on the indexing of benefits tend to be viewed as

confiscations of rightful benefits and result in rapidly mobilized minority voting response paralyzing the legislators and the proposed legislation. The net effect of corrective legislation is a pro-spending bias in a different but essentially unchecked guise.

C. DISCUSSION

1. General Review

The legislative process is not functioning as it was initially conceived,⁹ because it has been subjected to;

- the abuse of legislators, who have institutionalized, politicized, and incentivized their environment,
- the misuse of special interest groups, who extort the advantages of negative externalities from vote conscious politicians, and
- the neglect of the vast majority of voters, who abdicate political responsibility because of the "excessive" cost of involvement.

The complexity of issues and the difficulties associated with making relative value assessments within programs, among many programs, and across functional areas seriously degrade the ability of the legislature to function as a cost-effective mechanism for transforming public and private interests into public policy. Lawmaking is the basic response to the entire range of national concerns. It is essential to revenue generation and expenditure and the catalyst for all government activity.

When a bill does not pass or is tabled, it can be thought of as resulting from a contractual breakdown of some sort in the legislative marketplace. The sponsor and other supporters of a bill may have engaged in reneging or other noncooperative behavior in carrying through on their commitments. The leadership needs to limit such behavior, and one way to discipline reneging is to refuse to call up a member's bill for a final vote or not to support such bills when the floor vote is held. In other words, when shirking takes place, payoffs are withheld by not passing a member's bill. [Ref. 8: p. 838]

Special-interest groups become winners at the expense of the majority. Legislation introduced on their behalf tends to be excessively funded and inefficient. Politicians recognize that during reelections, special-interest groups are long in memory and politically potent because of their organization. The majority, on the other hand, is short on memory and tends to be apathetic because of the relatively low cost to the individual of any given piece of special-interest legislation.

⁹See discussion in paragraph B of this chapter.

2. Specialization

The Congressional structure uses the committee subcommittee system to focus on different aspects of required government activity. The control of this activity lies in the budget and the legislation that authorizes and appropriates the expenditures in the aggregated functional areas. Although in general, one committee has primary responsibility for legislation in a specific functional area, considerable overlap exists as legislation in any one area often has ramifications in other areas. For example, legislation within the functional area "agriculture" may have far reaching consequences in the functional areas of "international relations" and "health".

As the complexity of the environment increases, the potential for good and adverse impacts in numerous areas grows. The committee and subcommittee system permits increased attention by legislators on a wider variety and scale of legislation. This *specialization* has forced legislators to increase their reliance on each other and on the legislation proposed by their respective committees and subcommittees. No one legislator has the time, stamina, or mental capacity to assimilate the information processed by more than one or two committees and their subcommittees in the consideration of various legislation.

Wildavsky [Ref. 1: p. 225], argues that increased specialization leads to better monitoring of the dollar appropriation and of its past use within ongoing programs. He concludes that an increase in the number and size of committees and subcommittees is therefore desirable. Having reached the limits of the legislators' capacity to assimilate the complexity of the legislative environment, and given the current level of specialization and Wildavsky's *incremental budgeting* argument,¹⁰ we may have reached a point of diminishing benefits from increased specialization. Specialization is an attempt to reduce the calculation dilemma and the complexity issue, but it does not address the party incentive program for controlling and organizing party legislators, the impact of personal goals, and the demands of constituents. Those areas that specialization does not consider are the areas which tend to override economic considerations during a vote.

Wildavsky and others have argued that specialization is the key to knowledge and knowledge is the key to power (see [Ref. 1: p. 225]). While specialization does increase knowledge and knowledge does make for a more informed choice in the decision process, it is not clear that power is derived therefrom. It would seem more

¹⁰Wherein the current year "base" is rarely reviewed and only the proposed expenditure increases above the base are looked at in depth.

likely that power derives, at least initially, simply from the authority that comes from membership on the committee or subcommittee.

3. The Median Demander Paradox

If the legislative process were not institutionalized, politicized, and incentivized as discussed earlier, all legislators could aspire to any committee or subcommittee with a reasonable hope of serving in the desired capacity. Knowledgeability, personal preference, the needs of constituency and the national good would be primary motivators in the selection of committees on which to indicate a desire to serve. Within this frame of reference, a model, without CLT's control incentives and seniority recognition, would suggest that the highest demanders would be the most aggressive and successful in pursuing the different committee and subcommittee positions. Because the highest median demanders would serve on the various committees and subcommittees, the model would hypothesize greater expenditures than when assignments are arbitrary or are made on the basis of some incentive system where the relative power of position overrides national economic considerations and the real needs of the constituents.

Advocates of increased specialization counter the highest median demander problem by increasing the members on the committees and subcommittees and thereby reducing the median demand, moderating expenditures, and improving the monitoring of expenditures for effectiveness. However, increasing the membership also increases the representation of culturally distinct and geographically dispersed constituencies. What is good for one part of the country may not be good for another without a considerable increase in expenditures or an offsetting commitment for expenditures in another functional area. Increasing membership also provides broader access¹¹ to influential membership by special interest groups. The result may very well be a net increase in expenditures with an increase in specialization.

D. SUMMARY

The literature reviewed addresses the legislative process from the individual politician's perspective, from that of party leadership control initiatives, and from the role of special-interest groups in the formulation of inefficient political decisions. The

¹¹Ease of access for greater periods of time results when more legislators are available for lobbying purposes. Because more members with influence in specific areas are targetable, the potential for successful lobbying is greatly improved. Eventually, the number of lobbyists may increase as access becomes easier.

discussion addressed the issues of *specialization* and *median demand* within the congressional structure. This thesis looks at the effects on the process by the structure that uses it. The structural areas considered, which may have an impact on the process, include:

- changes over time in the number and political makeup of the committees and subcommittees which address the individual functional spending areas
- changes over time in the number of members on the committees and subcommittees which address the individual functional spending areas.

If structural aspects can be shown to have statistically significant bias toward increased spending, modification of these aspects can then be considered in the effort to control deficit spending.

III. THE MODEL AND THE DATA

A. INTRODUCTION

Chapter One briefly addressed the scope and methodology involved in the development of the econometric model. This chapter presents the model, discusses the variables and sources of the data, addresses the expected signs and rationale for the expected effects of the independent variables on the dependent variable, and notes some limitations of the data.

B. THE MODEL

The model estimates the effect of structural and other variables on the percentage change in functional expenditures over time. Because each session consists of two fiscal years, data for each session were averaged for the two-year period. The data begin with session 86 (years 1959-1960) for the percentage changes in expenditures, unemployment rate, and real national income, and with session 87 (years 1961-1962) for the remaining variables. Session 98 (years 1983-1984) is the last of the 12 sessions included in the data.

The estimating model is specified as follows:

$$\% \Delta G_{xi} = f(\% \Delta U, \% \Delta I, PA, PS, L, Hc, Sc, Hsc, Ssc, Hcm, Scm, Hscm, Sscm, Hd, Sd, Hcd, Scd, Hscd, Sscd) \quad (\text{eqn 3.1})$$

where:

- $\% \Delta G_{xi}$ percentage change in expenditure in functional area x during session i
- $\% \Delta U$ percentage change in the unemployment rate for session i
- $\% \Delta I$ percentage change in the real national income for session i
- PA Presidential affiliation during session i (= 0 if Republican, = 1 if Democrat)
- PS Presidential success rate during the session i (percentage of presidential victories on congressional votes where the president took a clear-cut stand)
- L the number of public laws passed during session i
- Hc the number of House committees in functional area x during session i
- Sc the number of Senate committees in functional area x during session i
- Hsc the number of House subcommittees in functional area x during session i

Ssc	the number of Senate subcommittees in functional area x during session i
Hcm	the number of members of House committees in functional area x during session i
Scm	the number of members of Senate committees in functional area x during session i
Hscm	the number of members of House subcommittees in functional area x during session i
Sscm	the number of members of Senate subcommittees in functional area x during session i
Hd	the Democratic percentage for the full House during session i
Sd	the Democratic percentage for the full Senate during session i
Hcd	the Democratic percentage of House committees in functional area x during session i
Scd	the Democratic percentage of Senate committees in functional area x during session i
Hscd	the Democratic percentage of House subcommittees in functional area x during session i
Sscd	the Democratic percentage of Senate subcommittees in functional area x during session i

C. THE DATA

1. The Dependent Variable ($\% \Delta G_{xi}$)

In selecting the dependent variable, the use of actual expenditures rather than authorizations or appropriations better reflects the final intent and mandate of Congress for a specified session. Actual expenditures represent the result of all actions taken by those respective committees and subcommittees involved. In keeping with the requirement of the Congressional Budget Act to "display all programs according to the principal national need that they are intended to serve" [Ref. 13: p. 8], the Historical Tables [Ref. 11: Section 3-1] provide a functional framework for grouping expenditures which would otherwise be unmanageable. The functional framework and grouping process applied across the years provides continuity. The functional expenditure data are adjusted for inflation using 1982 as the base year. Table 2 displays data on expenditure levels and percent changes for each of the functional areas of the data base. The percent change for each functional area was calculated using the formula:

$$\% \Delta G_i = (G_i / G_{i-1}) - 1 \quad (\text{eqn 3.2})$$

TABLE 2
DEPENDENT VARIABLE/FUNCTIONAL EXPENDITURES
SESSIONS 87-98

SESS	NATL DEF	ADMIN OF JUST	VETS' BEN SVCS	EDUC TRNG EMPLOY SVCS	AGRIC	GEN SCIENCE SPACE TECH	TRANS	REGIONAL DEVEL	HEALTH	MEDIC	SOCIAL SEC	INCOME SEC
87	161563	1312	17960	3667	9830	4362	13117	1179	3345	0	42534	29906
	1.2%	11.4%	1.2%	27.9%	-15.5%	200.8%	126.4%	66.2%	38.5%	.	22.2%	17.4%
88	165631	1458	17156	4636	13772	12172	15066	2308	4960	0	49629	29003
	2.5%	11.1%	-4.5%	26.5%	40.1%	177.8%	14.9%	95.7%	48.3%	.	16.7%	-3.0%
89	150039	1596	16927	9474	9305	18227	16705	3225	6299	93	55456	27786
	-4.6%	9.5%	-1.3%	104.4%	-32.4%	49.8%	10.9%	39.8%	27.0%	.	55.4%	-4.2%
90	208346	1734	18730	19158	10238	15974	16647	3363	10518	10050	61928	30829
	31.8%	8.6%	10.7%	102.2%	10.0%	-12.4%	-0.3%	4.9%	67.0%	W	11.7%	10.9%
91	200720	2106	19952	19782	13438	11652	16423	4822	12309	14557	70377	34311
	-3.7%	21.5%	6.5%	3.3%	31.3%	-27.1%	-1.3%	42.5%	17.0%	44.8%	13.6%	11.3%
92	173668	3252	22563	24618	10505	9194	18090	6975	17070	15513	83640	55637
	-13.4%	54.4%	13.1%	24.4%	-21.8%	-21.1%	10.2%	44.7%	38.7%	6.6%	18.8%	62.2%
93	150945	4449	24544	24350	6844	7741	17621	8535	19410	16320	101408	59868
	-13.2%	36.8%	8.8%	-1.1%	-34.8%	-15.8%	-2.6%	22.4%	13.7%	5.2%	21.2%	7.6%
94	143895	5127	28621	28539	5070	6833	20145	7977	23418	23455	113200	90641
	-4.7%	15.2%	16.6%	17.2%	-25.9%	-11.7%	14.3%	-6.5%	20.7%	43.7%	11.6%	51.4%
95	144614	5313	28535	34275	13006	6926	21756	13521	25682	30189	128259	87837
	0.5%	3.4%	-7.3%	20.1%	156.5%	1.4%	8.0%	69.5%	9.7%	28.7%	13.3%	-3.1%
96	152366	5126	25025	37776	12219	6736	23652	13227	26575	35657	135496	93061
	5.4%	0.2%	-5.7%	10.2%	-6.1%	-2.8%	8.7%	-2.2%	3.5%	18.1%	5.6%	5.9%
97	176712	4879	24201	31308	14055	7046	22682	10265	27995	44184	152344	106928
	16.0%	-8.4%	-3.3%	-17.1%	15.0%	4.6%	-4.1%	-22.4%	5.3%	23.9%	12.4%	14.9%
98	206476	5080	23824	25583	17240	7673	21248	7192	27884	51996	164753	111079
	16.8%	4.1%	-1.6%	-10.3%	22.7%	8.9%	-6.3%	-29.9%	-0.4%	17.7%	8.1%	3.9%

* Value deleted because it reflected the ratio of one year's start-up costs to a session's full program cost instead of the ratio of session to session program costs.

Note: Values are in millions of dollars indexed for inflation to base year 1982.

The historical tables provide some pertinent notes regarding the functional expenditure data.

In arraying data on a functional basis, budget authority and outlays are classified according to the primary purpose of the activity. To the extent feasible, this classification is made without regard to agency or organizational distinctions...The general rule underlying all of these tables is to provide data in as meaningful and comparable a fashion as is possible. The data are always presented on a basis consistent with current budget concepts. Insofar as is possible such changes are made for all years. [Ref. 11: Section 3-1, Intro 1-3]

2. Structural Variables

Structural variables are those variables that address the institutional structure of Congress. They are defined in terms of the size, number, and makeup of Congressional committees and subcommittees. The variables for each functional area are extracted from [Refs. 14,15], and presented in Table 3. They consist of:

- the number of committees and their subcommittees within both chambers that had, within their charter or title, responsibilities pertaining to the consideration of the same functional area. Some expenditure areas were addressed by the full committee only, while others had different aspects addressed by a number of subcommittees within the same committee.
- the corresponding membership of the responsible committees and subcommittees.
- the political makeup of the responsible committees and subcommittees.

3. Other Variables

In order to provide a broader base for analysis, several non-structural variables were also incorporated into the specification. The data for these variables are presented in Table 4 and consist of:

- real national income [Ref. 18: p. 205], which was adjusted for inflation using 1982 as the base year, and from which the percent change between sessions was calculated using a general version of equation (3.2) above.
- unemployment [Ref. 18: pp. 181,240], from which the percent change between sessions was calculated using a general version of equation (3.2) above.
- a dummy variable for presidential affiliation.
- the presidential success rate [Ref. 15: p. 19-c] on congressional votes where the president took a clearcut stand.¹²

¹²Based on *Congressional Quarterly's* ground rules and analysis. Three criteria are worth special note: first, "Members (of Congress) must be aware of the position when the vote is taken...(second,) All presidential-issue votes have equal statistical weight in the analysis... (and third,) Presidential support is determined by the position of the

TABLE 3
STRUCTURAL VARIABLES BY FUNCTIONAL AREA
SESSIONS 87-98

NATIONAL DEFENSE																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	SScd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	56.8	64.7	6.0	6.0	58.1	62.9	37.0	17.0	9.1	4.6	2	4	12.0	144.00
88	1	1	56.8	70.6	6.0	5.0	62.1	66.6	37.0	17.0	9.8	4.6	2	4	11.0	121.00
89	1	1	67.6	70.6	11.0	5.0	64.6	65.0	37.0	17.0	8.1	5.3	2	2	16.0	256.00
90	1	1	57.5	66.7	16.5	5.0	58.1	65.8	40.0	18.0	7.9	6.4	2	4	21.5	462.25
91	1	1	57.5	55.6	18.0	5.0	56.7	58.5	40.0	18.0	7.6	7.2	2	4	23.0	529.00
92	1	1	61.0	56.3	10.5	12.5	59.6	57.3	41.0	16.0	8.5	6.1	2	4	23.0	529.00
93	1	1	56.3	60.0	8.0	12.0	58.7	59.9	43.5	15.0	9.9	6.3	2	4	20.0	400.00
94	1	1	67.5	62.5	7.0	9.0	69.4	59.8	40.0	16.0	12.1	7.3	2	4	16.0	256.00
95	1	1	67.5	61.1	7.0	8.0	68.8	61.4	40.0	18.0	12.9	6.8	2	4	15.0	225.00
96	1	1	64.8	58.8	8.0	6.0	64.1	56.4	44.0	17.0	12.5	8.0	2	4	14.0	196.00
97	1	1	57.3	47.1	7.0	6.0	57.1	44.8	44.5	17.0	13.7	7.3	2	4	13.0	169.00
98	1	1	64.4	44.4	7.0	6.0	64.7	43.8	45.0	18.0	13.7	8.9	2	4	13.0	169.00
ADMINISTRATION OF JUSTICE																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	SScd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	60.0	63.4	8.0	15.0	58.7	60.8	35.0	15.0	8.8	6.2	2	4	23.0	529.00
88	1	1	60.0	66.7	6.0	14.0	59.7	63.9	35.0	15.0	9.0	6.3	2	4	20.0	400.00
89	1	1	68.6	68.8	7.0	14.5	63.5	66.2	35.0	16.0	9.7	6.4	2	4	21.5	462.25
90	1	1	57.1	68.8	8.0	16.0	56.9	67.0	35.0	16.0	8.6	6.3	2	4	24.0	576.00
91	1	1	57.1	58.8	7.0	15.0	55.5	64.9	35.0	17.0	9.6	6.5	2	4	22.0	484.00
92	1	1	57.9	56.3	5.0	15.0	59.2	59.1	38.0	16.0	9.3	7.1	2	4	20.0	400.00
93	1	1	55.3	56.3	7.0	16.0	56.2	60.2	38.0	16.0	9.1	7.0	2	4	23.0	529.00
94	1	1	67.2	60.0	7.0	15.0	71.1	60.2	34.0	15.0	7.9	7.0	2	4	22.0	484.00
95	1	1	67.6	64.7	7.0	10.0	70.9	65.4	34.0	17.0	7.4	5.1	2	4	17.0	289.00
96	1	1	64.5	58.8	7.0	7.0	66.7	59.3	31.0	17.0	9.4	6.9	2	4	14.0	196.00
97	1	1	57.1	50.0	7.0	9.0	57.3	41.7	28.0	18.0	7.7	4.9	2	4	16.0	256.00
98	1	1	64.5	44.4	7.0	9.0	62.2	39.9	31.0	18.0	9.6	5.6	2	4	16.0	256.00
VETERANS' BENEFITS AND SERVICES																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	SScd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	2	60.0	65.7	6.0	1.0	56.5	60.0	25.0	16.0	7.5	5.0	3	9	7.0	49.00
88	1	2	60.0	65.7	6.0	1.0	59.3	60.0	25.0	16.0	7.3	5.0	3	9	7.0	49.00
89	1	2	68.0	65.2	5.0	1.0	63.4	66.7	25.0	16.5	11.5	6.0	3	9	6.0	36.00
90	1	2	56.0	63.6	5.0	1.0	54.9	62.5	25.0	16.5	11.0	8.0	3	9	6.0	36.00
91	1	2	58.0	58.8	5.0	1.0	55.9	58.8	25.0	17.0	11.4	8.5	3	9	6.0	36.00
92	1	1	61.5	55.6	5.0	4.0	52.2	60.0	26.0	9.0	10.4	5.0	2	4	9.0	81.00
93	1	1	57.7	55.6	5.0	4.0	55.1	60.0	26.0	9.0	13.8	5.0	2	4	9.0	81.00
94	1	1	67.9	61.2	5.0	4.5	70.4	63.4	28.0	9.0	12.5	5.5	2	4	9.5	90.25
95	1	1	67.9	66.7	5.0	3.0	70.2	66.7	28.0	9.0	12.4	6.0	2	4	8.0	64.00
96	1	1	65.6	60.0	5.0	0.0	63.9	0.0	32.0	10.0	14.0	0.0	2	4	5.0	25.00
97	1	1	55.4	41.7	5.0	0.0	55.7	0.0	33.0	12.0	12.8	0.0	2	4	5.0	25.00
98	1	1	63.6	41.7	5.0	0.0	64.6	0.0	33.0	12.0	12.4	0.0	2	4	5.0	25.00
EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	SScd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	61.3	66.7	7.0	7.0	56.2	64.2	31.0	15.0	6.9	6.4	2	4	14.0	196.00
88	1	1	61.3	66.7	6.0	7.0	60.7	64.2	31.0	15.0	9.1	6.5	2	4	13.0	169.00
89	1	1	67.7	65.7	9.0	7.5	65.6	66.4	31.0	16.0	8.9	7.8	2	4	16.5	272.25
90	1	1	57.6	62.5	6.0	8.0	57.3	65.5	33.0	16.0	13.3	7.7	2	4	14.0	196.00
91	1	1	57.1	58.8	6.0	10.5	56.4	58.1	35.0	17.0	14.5	9.4	2	4	16.5	272.25
92	1	1	57.9	58.8	7.5	14.5	60.9	59.1	38.0	17.0	14.6	9.0	2	4	22.0	484.00
93	1	1	57.9	62.5	8.0	12.5	62.3	63.4	38.0	16.0	11.6	9.7	2	4	20.5	420.25
94	1	1	67.1	61.3	8.0	11.0	68.9	62.2	39.5	15.5	12.7	10.7	2	4	19.0	361.00
95	1	1	67.6	60.0	8.0	8.0	66.4	60.9	37.0	15.0	12.1	5.6	2	4	16.0	256.00
96	1	1	64.4	60.0	9.0	7.0	69.1	59.9	36.5	15.0	12.3	6.4	2	4	16.0	256.00
97	1	1	58.2	43.8	8.0	7.0	61.2	40.5	33.5	16.0	10.1	6.6	2	4	15.0	225.00
98	1	1	64.8	44.4	8.0	7.0	65.7	41.4	34.0	18.0	11.4	8.2	2	4	15.0	225.00

TABLE 3
STRUCTURAL VARIABLES BY FUNCTIONAL AREA
SESSIONS 87-98 (CONT'D.)

AGRICULTURE																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Sscd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	60.0	64.7	14.0	4.0	61.5	59.9	35.0	17.0	10.7	7.5	2	4	18.0	324.00
88	1	1	60.0	64.7	15.0	5.0	60.9	63.1	35.0	17.0	10.7	7.0	2	4	20.0	400.00
89	1	1	68.6	66.7	15.0	5.0	66.2	63.4	35.0	15.0	9.8	6.6	2	4	20.0	400.00
90	1	1	57.1	66.7	15.0	5.0	57.6	61.5	35.0	15.0	7.6	6.3	2	4	20.0	400.00
91	1	1	55.2	53.8	10.0	5.0	57.6	59.3	33.5	13.0	7.8	6.2	2	4	15.0	225.00
92	1	1	62.0	57.1	10.0	6.0	62.5	57.8	35.5	14.0	8.8	6.7	2	4	16.0	256.00
93	1	1	55.6	53.8	10.0	6.0	55.6	57.4	36.0	13.0	9.9	7.0	2	4	16.0	256.00
94	1	1	66.3	64.3	10.0	6.0	71.3	62.6	54.0	14.0	11.3	8.2	2	4	16.0	256.00
95	1	1	67.4	61.1	10.0	7.0	72.5	60.9	46.0	18.0	12.2	7.4	2	4	17.0	289.00
96	1	1	64.3	55.6	10.0	7.0	68.8	55.2	42.0	18.0	10.7	7.7	2	4	17.0	289.00
97	2	1	56.7	47.1	9.0	8.0	58.3	39.8	41.5	17.0	13.9	7.0	3	9	17.0	289.00
98	2	1	63.4	44.4	9.0	7.0	66.7	40.9	41.0	18.0	12.6	7.3	3	9	16.0	256.00
GENERAL SCIENCE, SPACE, AND TECHNOLOGY																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Sscd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	2	2	60.5	65.6	5.0	0.0	59.6	0.0	29.8	16.0	9.4	0.0	4	16	5.0	25.00
88	2	2	59.4	68.8	4.0	0.0	59.3	0.0	32.0	16.0	13.5	0.0	4	16	4.0	16.00
89	2	2	67.2	68.6	6.0	0.0	66.5	0.0	33.5	17.5	14.4	0.0	4	16	6.0	36.00
90	2	2	58.2	62.9	6.0	0.0	57.9	0.0	33.5	17.5	16.4	0.0	4	16	6.0	36.00
91	2	2	55.7	60.0	6.5	0.0	56.1	0.0	35.0	15.0	17.3	0.0	4	16	6.5	42.25
92	2	2	57.0	55.6	7.0	0.0	59.8	0.0	33.8	13.5	15.6	0.0	4	16	7.0	49.00
93	2	3	55.7	58.3	7.0	2.0	56.8	63.6	35.0	16.0	20.5	5.5	5	25	9.0	81.00
94	2	3	67.4	62.6	8.0	2.0	67.8	60.7	36.0	15.2	19.5	14.0	5	25	10.0	100.00
95	2	2	67.5	61.2	8.0	2.0	67.7	62.5	38.5	16.8	19.8	8.0	4	16	10.0	100.00
96	2	3	64.5	59.6	8.0	3.0	64.2	61.5	38.0	15.7	17.8	8.7	5	25	11.0	121.00
97	2	2	57.1	47.1	8.0	2.0	57.4	42.9	38.5	17.0	18.5	7.0	4	16	10.0	100.00
98	2	2	63.9	46.4	8.0	2.0	63.7	41.7	38.8	17.3	19.7	6.0	4	16	10.0	100.00
TRANSPORTATION																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Sscd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	2	2	59.7	64.7	3.0	6.0	62.2	61.9	33.5	17.0	15.0	7.0	4	16	9.0	81.00
88	2	2	59.7	70.6	3.0	4.0	61.4	68.4	33.5	17.0	14.7	9.5	4	16	7.0	49.00
89	2	2	67.2	68.6	3.0	4.0	66.7	67.5	33.5	17.5	15.0	10.0	4	16	7.0	49.00
90	2	2	56.7	64.7	3.0	4.0	56.9	65.0	33.5	17.0	17.0	10.0	4	16	7.0	49.00
91	2	2	56.3	58.8	3.0	4.0	56.9	58.4	35.5	17.0	17.0	11.1	4	16	7.0	49.00
92	2	2	60.0	55.9	2.0	6.0	59.5	56.4	40.0	17.0	18.5	9.2	4	16	8.0	64.00
93	2	2	57.6	59.4	2.0	6.0	58.3	59.3	41.3	16.0	18.0	9.0	4	16	8.0	64.00
94	3	2	66.1	65.2	4.0	6.0	69.2	65.4	38.3	16.5	16.3	8.7	5	25	10.0	100.00
95	3	2	52.6	60.0	4.0	3.0	68.4	63.4	42.2	16.3	17.0	13.6	5	25	7.0	49.00
96	3	2	64.4	58.1	4.0	3.0	66.7	60.9	44.0	15.5	16.5	7.7	5	25	7.0	49.00
97	3	2	57.0	45.5	4.0	3.0	60.0	44.0	42.7	16.5	18.8	8.3	5	25	7.0	49.00
98	3	2	71.4	45.6	4.0	3.0	66.7	44.2	44.3	17.0	18.0	8.7	5	25	7.0	49.00
COMMUNITY AND REGIONAL DEVELOPMENT																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Sscd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	2	2	59.4	64.7	7.5	4.0	59.0	63.9	34.5	17.0	27.1	15.7	4	16	11.5	132.25
88	2	2	59.4	67.6	8.0	4.5	58.8	69.1	34.5	17.0	25.5	15.1	4	16	12.5	156.25
89	2	2	68.1	68.8	8.0	5.0	67.5	69.3	34.5	16.0	22.6	14.8	4	16	13.0	169.00
90	2	2	56.5	64.5	10.0	6.0	56.0	62.1	34.5	15.5	28.9	14.4	4	16	16.0	256.00
91	2	2	55.6	57.1	9.0	6.5	56.0	59.8	33.8	14.0	31.5	14.6	4	16	15.5	240.25
92	2	2	62.1	56.7	8.0	8.0	62.2	56.4	36.3	15.0	34.2	14.0	4	16	16.0	256.00
93	2	2	57.3	55.6	3.0	5.0	62.2	57.6	37.5	13.5	21.0	6.6	4	16	8.0	64.00
94	2	2	64.7	64.3	3.0	5.0	58.7	64.7	39.0	14.0	18.3	6.8	4	16	8.0	64.00
95	2	2	67.0	60.6	3.0	3.0	69.6	58.8	44.8	16.5	18.7	5.7	4	16	6.0	36.00
96	2	2	64.4	56.3	3.0	3.0	65.7	63.2	45.0	16.0	17.5	6.3	4	16	6.0	36.00
97	2	2	56.2	45.5	4.0	3.0	59.1	44.4	44.5	16.5	15.9	6.0	4	16	7.0	49.00
98	2	2	63.7	44.3	4.0	3.0	63.9	47.1	45.5	17.5	15.3	5.7	4	16	7.0	49.00

TABLE 3
STRUCTURAL VARIABLES BY FUNCTIONAL AREA
SESSIONS 87-98 (CONT'D.)

HEALTH																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Scsd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	3	2	60.6	68.8	1.0	1.0	57.1	66.7	33.0	16.0	7.0	6.0	5	25	2.0	4.00
88	3	2	60.6	68.8	1.0	1.0	57.1	66.7	33.0	16.0	7.0	6.0	5	25	2.0	4.00
89	3	2	67.7	66.1	1.0	1.0	64.7	71.4	33.0	15.5	8.5	7.0	5	25	2.0	4.00
90	3	2	57.4	64.5	1.0	1.0	57.1	62.5	33.7	15.5	7.0	8.0	5	25	2.0	4.00
91	3	2	56.4	56.7	1.0	1.0	55.6	58.3	35.2	15.0	9.0	12.0	5	25	2.0	4.00
92	3	2	59.2	58.1	1.0	1.0	58.3	57.1	38.8	15.5	12.0	14.0	5	25	2.0	4.00
93	3	2	56.6	58.6	1.0	1.0	54.5	58.6	39.2	14.5	11.0	14.5	5	25	2.0	4.00
94	3	2	66.9	62.7	2.0	1.0	72.4	61.5	45.5	14.8	14.5	13.0	5	25	3.0	9.00
95	3	2	67.5	60.6	3.0	2.0	72.2	55.6	42.0	16.5	12.0	6.8	5	25	5.0	25.00
96	3	2	64.3	57.6	3.0	2.0	68.2	56.3	40.2	16.5	11.0	8.0	5	25	5.0	25.00
97	3	2	57.0	45.5	3.0	2.0	63.8	41.7	39.5	16.5	11.5	6.0	5	25	5.0	25.00
98	3	2	64.1	44.4	3.0	2.0	68.8	43.8	39.0	18.0	10.7	8.0	5	25	5.0	25.00
MEDICARE																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Scsd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
88	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
89	1	1	68.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
90	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
91	1	1	60.0	58.8	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
92	1	1	60.0	56.3	0.0	1.0	0.0	55.6	25.0	16.0	0.0	9.0	2	4	1.0	1.00
93	1	1	60.0	58.8	0.0	1.0	0.0	55.6	25.0	17.0	0.0	9.0	2	4	1.0	1.00
94	1	1	67.6	61.1	1.0	1.0	69.2	63.6	37.0	18.0	13.0	11.0	2	4	2.0	4.00
95	1	1	67.6	61.1	1.0	1.0	69.2	62.5	37.0	18.0	13.0	8.0	2	4	2.0	4.00
96	1	1	66.7	60.0	1.0	1.0	66.7	57.1	36.0	20.0	9.0	7.0	2	4	2.0	4.00
97	1	1	65.7	42.9	1.0	1.0	62.5	42.9	35.0	20.0	8.0	7.0	2	4	2.0	4.00
98	1	1	65.7	45.0	1.0	1.0	62.5	42.9	35.0	20.0	8.0	7.0	2	4	2.0	4.00
SOCIAL SECURITY																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Scsd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
88	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
89	1	1	68.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
90	1	1	60.0	64.7	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
91	1	1	60.0	58.8	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
92	1	1	60.0	56.3	0.0	0.0	0.0	0.0	25.0	16.0	0.0	0.0	2	4	0.0	0.00
93	1	1	60.0	58.8	0.0	0.0	0.0	0.0	25.0	17.0	0.0	0.0	2	4	0.0	0.00
94	1	1	67.6	61.1	1.0	1.0	69.2	60.0	37.0	18.0	13.0	5.0	2	4	2.0	4.00
95	1	1	67.6	61.1	1.0	1.0	69.2	60.0	37.0	18.0	13.0	5.0	2	4	2.0	4.00
96	1	1	66.7	60.0	1.0	1.0	66.7	60.0	36.0	20.0	9.0	5.0	2	4	2.0	4.00
97	1	1	65.7	42.9	1.0	1.0	63.6	42.9	35.0	20.0	11.0	7.0	2	4	2.0	4.00
98	1	1	65.7	45.0	1.0	1.0	63.6	50.0	35.0	20.0	11.0	8.0	2	4	2.0	4.00
INCOME SECURITY																
Sess	Hc	Sc	Hcd	Scd	Hsc	Ssc	Hscd	Scsd	Hcm	Scm	Hscm	Sscm	Cc	Cc ²	Csc	Csc ²
87	2	2	60.7	65.5	2.0	1.0	58.3	66.7	28.0	16.0	6.0	6.0	4	16	3.0	9.00
88	2	2	60.7	65.6	1.0	1.0	62.5	66.7	28.0	16.0	8.0	9.0	4	16	2.0	4.00
89	2	2	67.9	65.2	2.0	1.0	66.7	66.7	28.0	16.5	9.8	9.0	4	16	3.0	9.00
90	2	2	58.6	63.6	1.0	1.0	58.3	66.7	29.0	16.5	12.0	9.0	4	16	2.0	4.00
91	2	2	58.3	60.3	1.0	1.0	57.1	58.3	30.0	17.0	14.0	12.0	4	16	2.0	4.00
92	2	2	58.7	58.2	1.0	1.0	62.5	58.3	31.5	16.8	8.0	12.0	4	16	2.0	4.00
93	2	2	58.7	60.0	1.0	3.0	62.5	58.3	31.5	16.3	8.0	8.0	4	16	4.0	16.00
94	2	2	66.0	60.6	2.0	3.0	70.8	60.9	35.3	16.5	12.0	7.7	4	16	5.0	25.00
95	2	2	67.6	60.6	2.0	3.0	70.8	58.8	37.0	16.5	12.0	5.7	4	16	5.0	25.00
96	2	2	65.5	60.0	3.0	3.0	69.2	61.5	36.3	17.5	8.7	4.3	4	16	6.0	36.00
97	2	2	62.0	44.4	3.0	3.0	64.0	43.8	34.8	18.0	8.3	4.3	4	16	6.0	36.00
98	2	2	65.2	44.7	2.0	1.0	63.6	44.4	34.5	19.0	12.8	6.0	4	16	3.0	9.00

TABLE 4
OTHER EXPLANATORY VARIABLES
SESSIONS 87-98

SESS	GNP % Δ	UNEMPLOY % Δ	LAWS PASSED	PRES AFFIL	PRES SUCCESS	HOUSE DEMS	SEN DEMS
87	1704.60 5.85%	6.10 10.91%	442.5	1	83.2	59.7	64
88	1865.24 9.42%	5.45 -10.65%	333.0	1	87.6	59.0	67
89	2055.38 10.19%	4.15 -23.85%	405.0	1	86.0	67.7	68
90	2236.30 8.80%	3.70 -10.84%	320.0	1	77.0	56.7	64
91	2347.19 4.96%	4.20 13.51%	347.5	0	75.5	55.9	58
92	2429.37 3.50%	5.75 36.90%	303.5	0	70.5	58.9	55
93	2611.11 7.48%	5.25 -8.70%	325.5	0	54.8	56.4	58
94	2633.25 0.85%	8.10 54.29%	294.0	0	57.4	66.4	62
95	2945.66 11.86%	6.60 -18.52%	316.5	1	76.9	66.1	62
96	3116.13 5.79%	6.45 -2.27%	306.5	1	76.0	63.2	59
97	3158.61 1.36%	8.65 34.12%	236.5	0	77.4	55.8	47
98	3312.65 4.88%	8.55 -1.16%	311.5	0	66.5	61.4	45

Note 1: GNP is adjusted for inflation using 1982 as the base year. Source for GNP is [Ref. 11: Section 1.2] and the deflator is [Ref. 12: p. 248].

Note 2: The columns UNEMPLOYMENT, PRESIDENTIAL SUCCESS, HOUSE DEMOCRATS, and SENATE DEMOCRATS are presented as percentages.

Note 3: The column PRESIDENTIAL AFFILIATION is a dummy variable assignment (0 = Republican, 1 = Democrat).

Note 4: The column LAWS PASSED is the average of the two years of laws passed during the specified Session.

- the number of public laws that were passed during the various sessions [Refs. 16,17]

D. EXPECTATIONS

Each of the independent variables included in the model is expected to have an effect on the dependent variable ($\% \Delta G_{xi}$). It is the magnitude and the direction of this effect that is of interest, particularly in those variables which may have dual opposing effects. The pros and cons of the *specialization* argument and the funding emphasis of both parties are discussed as a generic basis for the expected directional effect in a number of the structural variables and in the Democratic percentage variables, respectively.

Specialization arguments predict a reduction in expenditures as a result of better monitoring of previous and expected funds flow. The price of information is reduced by the value of some of the legislator's personal costs, i.e. the redirection of more of his time, effort, and concentration to the increased detail expected of *specialization*. But specialization at this level of government permits an abdication of fiscal responsibility and accountability at lower levels; a sort of "deep pockets" spending bias results, permeating to the lowest echelon levels. Efficiency incentives at the lower levels disappear in a "budget for everything" frenzy. Justification prerogatives and accountability rest with the "specialized" legislator, who has precious little more of the mechanics of the program information than he did before. Specialization also provides the vehicle by which increased representation of culturally distinct and geographically dispersed constituency can effect legislation. Where no other political biases influence selection, the highest median demander (including special interest group representation) will gravitate to those committees and subcommittees which have the most direct effect on their respective constituencies. Increased specialization reduces the ability of the legislator to view his area of specialization in the context of national priorities and limited resources availability. A strong bias to fund to get the "job" done exists because results reflect legislative ability and encourage voter support.

Because the Democratic party tends to emphasize social programs which encompass a number of functional areas and involve an aggregate dollar commitment greater than programs (e.g. National Defense) favored by Republicans, an increase in the percentage of democrats on committees and subcommittees will tend to be associated with greater government expenditures.

president at the time of a vote," [Ref. 15: p. 21-c] regardless of a previous or subsequent stance taken.

The following are the hypothesized directional effects and associated rationale for each of the independent variables.

$\% \Delta U$ (+) As unemployment increases, because of the automatic stabilizers associated with the tax code, government revenues tend to fall and spending to rise. This occurs without any explicit action on the part of Congress. However, recessions also tend to trigger actions by Congress allegedly intended to relieve unemployment. These programs represent an induced increase in government spending.

$\% \Delta I$ (?) As real national income increases, reduced unemployment (i.e. lower income security costs) and increased tax revenues (the result of increased employment, not the tax bracket creep of inflation) increases the availability of revenues for government spending in other areas - a positive effect. But the reduced need for government intervention relative to fueling the economy and meeting income security requirements suggests reduced government spending - a negative effect.

PA (+) Presidential Affiliation is expected to have a greater positive effect with a Democratic president, given the predominantly Democratic control of the Congress in most of the sessions represented in the data base, than with a Republican president. Historically, Democratic emphasis has been on social programs (several functional areas) while Republican emphasis has focussed on national defense, the single largest functional area within the budget. A Republican President's budget submission may emphasize increased spending in the area of national defense with a measure of success, but his efforts to reduce social spending will be largely unsuccessful in a Democratically controlled Congress.

PS (?) The effect of an increase in the percentage of presidential victories on congressional votes where the president took a clear-cut stand is unclear since presidential stands could have been either in favor of or opposed to the various legislation. However, one would expect a greater percentage of presidential stands in favor of legislation when the president is a Democrat enjoying a Democratic majority in Congress.

L (+) An increase in government expenditures would tend to accompany an increase in the number of public laws passed during a session, *ceteris paribus*.

Hc (?) As the number of House committees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.

Sc (?) As the number of Senate committees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.

Hsc (?) As the number of House subcommittees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.

- Ssc (?) As the number of Senate subcommittees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization argument.
- Hcm (?) As the number of members of House committees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.
- Scm (?) As the number of members of Senate committees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.
- Hscm (?) As the number of members of House subcommittees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.
- Sscm (?) As the number of members of Senate subcommittees increases, the hypothesized increase in government spending is potentially offset by the savings due to specialization.
- Hd (+) As Democratic percentages in the House increase, government expenditures will increase.
- Sd (+) As Democratic percentages in the Senate increase, government expenditures will increase.
- Hcd (+) As Democratic percentages in House committees increase, government expenditures will increase.
- Scd (+) As Democratic percentages in Senate committees increase, government expenditures will increase.
- Hscd (+) As Democratic percentages in House subcommittees increase, government expenditures will increase.
- Sscd (+) As Democratic percentages in Senate subcommittees increase, government expenditures will increase.

E. LIMITATIONS

Because complete data were available for only 12 of the 18 functional expenditure categories, the findings and conclusions are not as general as would have been possible were the complete set of data used.

Because each chamber sets its structure, substructure membership, and political make up at the beginning of each session, a number of changes occurred over the sessions. Some were merely title changes, e.g. the changes from Foreign Affairs to International Affairs and back. Other changes evolved because of the ebb and flow of national attention and involved the establishment of new committees, e.g. the Energy committee in both chambers, or the demise of committees, e.g. the Interior and Insular Affairs committee in the Senate. Changes in responsibility occurred, but every effort

was made to track responsibility for the functional areas through the various structural changes that occurred.

IV. REGRESSION RESULTS AND ANALYSIS

A. BRIEF OVERVIEW OF THE REGRESSION PROGRAM

The regressions were performed using the SAS (formerly called the Statistical Analysis System) software for data analysis. The statistical analysis procedure used is the SAS GLM (General Linear Models) for multiple regression. The GLM results were provided in four groupings which include:

- a general summary, which include the degrees of freedom, sum of squares (SS), mean square, and F value.
- the Type I SS for each of the independent variables considered. The Type I SS represents the fit of each variable within the regression in the absence of the remaining variables.
- the Type III SS for each of the independent variables considered. The Type III SS represents the fit of each variable within the regression after fitting all other variables. Comparison of Type I and Type III SSs provides an indication of correlation among the independent variables.
- the *estimates* and T statistics grouping for each of the independent variables. The T statistics are the square root of the Type III F values. The T statistic tests the hypothesis that the calculated coefficient was observed from a distribution with zero correlation between the independent variable and the dependent variable. "B" coding indicates no direct estimate of the coefficient can be made. Estimates represent the percent change in the dependent variable per unit change of the independent variable. Intercorrelation of the independent variables obfuscates interpretation of the estimates except in those instances where a comparison of Type I SS and Type III SS indicates low correlation.

Tables with regression results accompany discussions contrasting results with expectations described in the previous chapter. The following notes accompanied each of the regressions.

NUMBER OF OBSERVATIONS IN DATA SET = 144

ALL DEPENDENT VARIABLES ARE CONSISTENT WITH RESPECT TO THE PRESENCE OR ABSENCE OF MISSING VALUES. HOWEVER, ONLY 140 OBSERVATIONS IN DATA SET CAN BE USED IN THIS ANALYSIS

THE XX MATRIX HAS BEEN DEEMED SINGULAR AND A GENERALIZED INVERSE HAS BEEN EMPLOYED TO SOLVE THE NORMAL EQUATIONS. THE ABOVE ESTIMATES REPRESENT ONLY ONE OF MANY POSSIBLE SOLUTIONS TO THE NORMAL EQUATIONS. ESTIMATES FOLLOWED BY THE LETTER B ARE BIASED AND DO NOT ESTIMATE THE PARAMETER BUT ARE BLUE FOR SOME LINEAR COMBINATION OF PARAMETERS (OR ARE ZERO). THE EXPECTED VALUE OF THE BIASED ESTIMATORS MAY BE OBTAINED

FROM THE GENERAL FORM OF ESTIMABLE FUNCTIONS. FOR THE BIASED ESTIMATORS, THE STD ERR IS THAT OF THE BIASED ESTIMATOR AND THE T VALUE TESTS $H_0: E(\text{BIASED ESTIMATOR}) = 0$. ESTIMATES NOT FOLLOWED BY THE LETTER B ARE BLUE FOR THE PARAMETER.

B. ANALYSIS OF REGRESSION RESULTS

The analysis is divided into three sections. The first is a general comparison, while the remaining two sections focus on the individual regressions differing only according to the manner in which the dependent variable is measured: (1) regressions wherein the dependent variable is aggregated over all functional areas; and (2) regressions wherein the differences in the dependent variable by functional areas are accounted for. Functional area differences are modeled by the use of a dummy variable (C50). Regressions were run using:

- the aggregate of the dependent variable and all independent variables (Table 5)
- the aggregate of the dependent variable and all non-partisan variables (Table 6)
- the dependent variable, with the differences of functional area accounted for, and all independent variables (Table 7)
- the dependent variable, with the differences of functional area accounted for, and all non-partisan variables (Table 8)

1. General Comparison

In the overall tests, SAS GLM calculates and compares a precise critical F-value¹³ with the calculated F-value for each regression. In each of these regressions, the F-value exceeded the critical value by a significant margin. The probabilities ($PR > F$) of finding F-values of this magnitude or larger in a strictly random data sample range from 0.37 to 1.37 percent. These overall tests of the calculated F-value would indicate a rejection of the null hypothesis, i.e. that there is zero correlation between the aggregate independent variables and the dependent variable.

Only three of the variables had coefficients with a consistently high degree of significance (i.e. probability less than 5 percent) such that F-values of equal or greater magnitude would not be expected to be observed in a strictly random data sample. These variables include: the percent change in GNP, the percent change in unemployment, and the number of public laws passed within a given session. In every regression, the coefficient for each of these variables was significantly different from zero, whether the variable was fitted in the absence of any other variable or fitted after consideration of all other variables. For each of these variables, the average of their

¹³SAS GLM does not provide a printout of these critical F-values. Estimates of the F-values are 1.68, 1.82, 1.57, and 1.62 respectively.

coefficient estimates from all four regressions is used in discussing the effects on expenditures (in billions of dollars).

We can observe that a 1.0 percent increase in real national income corresponds to an estimated 6.88 percent increase in expenditures across functional areas. This suggests that the pressure to reduce government spending because of reduced need for government intervention relative to fueling the economy and meeting income security requirements is overshadowed by the availability of increased revenues and the desire of legislators to fund new programs and expand existing programs.

We can observe that a 1.0 percent increase in unemployment corresponds to an estimated 1.04 percent increase in expenditures across functional areas. The estimate effect is in agreement with our expectations. Stabilization policy appears to dictate increases in government programs as unemployment rises. Alternatively, the automatic stabilizing effects of the personal and corporate income taxes, combined with the unemployment insurance system, impart a strong impact on net spending.

We can observe that every additional public law passed corresponds to an estimated 0.16 percent increase in overall expenditures. The estimate is positive and in agreement with our expectations, although the magnitude of the effect is very small.

2. Regressions with the Dependent Variable Aggregated over all Functional Areas

a. All Independent Variables (Table 5)

Structural, partisan, and other variables are combined in this regression to determine the significance of each variable and the ability of the combined variables to explain changes in the dependent variable.

Aside from the three independent variables with statistical significance addressed earlier, Democratic percentage in the Senate subcommittees has a calculated F-value that is significant at the 1 percent significance level. The estimates and t-tests suggest that for every one-unit increase in the Democratic percentage of all Senate subcommittees addressing various legislation pertaining to a given functional area, we would expect to see a decrease of -0.83 percent in expenditures within that functional area. The direction of this effect contradicts our expectation of the impact of increased Democratic percentages in Senate subcommittees.

Although they have no statistical significance when fitted before any other independent variable, both the percentage of Democrats in the House and the percentage of Democrats on the House subcommittees greatly increase their F-values with high significance levels of 5.5 and 3.5 percent respectively, when fitted after the

TABLE 5
AGGREGATE DEPENDENT VARIABLE
ALL INDEPENDENT VARIABLES

Dependent Variable: C1 = Percent Change Within Functional Area

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE
Model	19	45659.18341251	2403.11491645	2.29
Error	120	126064.66046991	1050.53883725	PR > F
Corrected Total	139	171723.84388242		0.0037

R-SQUARE	C.V.	ROOT MSE	C1 MEAN
0.2658876	192.9992	32.41201686	16.79386429

SOURCE	DF	TYPE I SS	F VALUE	PR > F
C2 % chg GNP	1	4851.04618048	4.62	0.0337
C3 % chg Unemployment	1	6386.13326950	6.08	0.0151
C4 Public Laws (L)	1	6402.52855626	6.09	0.0150
C5 Pres Affil (PA)	1	1884.62328428	1.79	0.1830
C6 Pres Success % (PS)	1	1137.10201928	1.08	0.3003
C7 House Dems (Hd)	1	1425.68717595	1.36	0.2464
C8 Senate Dems (Sd)	1	238.83324688	0.23	0.6344
C9 H Comms (Hc)	1	2216.09762871	2.11	0.1490
C10 S Comms (Sc)	1	1013.87963144	0.97	0.3279
C11 Hcd	1	1745.35024674	1.66	0.1999
C12 Scd	1	374.97967148	0.36	0.5513
C13 H Subc (Hsc)	1	492.65783165	0.47	0.4948
C14 S Subc (Ssc)	1	574.46049209	0.55	0.4611
C15 Hscd	1	770.76390269	0.73	0.3934
C16 Sscd	1	7303.26081412	6.93	0.0095
C17 Hc Mbrs (Hm)	1	18.16512444	0.02	0.8956
C18 Sc Mbrs (Sm)	1	3823.24127513	3.64	0.0588
C19 Hscm	1	3037.90291052	2.89	0.0916
C20 Sscm	1	1962.47015087	1.87	0.1743

SOURCE	DF	TYPE III SS	F VALUE	PR > F
C2 % chg GNP	1	5858.98152458	5.58	0.0198
C3 % chg Unemployment	1	7529.04662692	7.17	0.0085
C4 Public Laws (L)	1	5259.83603373	5.01	0.0271
C5 Pres Affil (PA)	1	1522.17971640	1.45	0.2311
C6 Pres Success % (PS)	1	302.59608652	0.29	0.5925
C7 House Dems (Hd)	1	3955.35861926	3.77	0.0547
C8 Senate Dems (Sd)	1	929.47120716	0.88	0.3488
C9 H Comms (Hc)	1	1801.98157153	1.72	0.1928
C10 S Comms (Sc)	1	1845.39702678	1.76	0.1876
C11 Hcd	1	1141.44524235	1.09	0.2993
C12 Scd	1	399.58696957	0.38	0.5386
C13 H Subc (Hsc)	1	1548.60115641	1.47	0.2271
C14 S Subc (Ssc)	1	1409.87908300	1.34	0.2490
C15 Hscd	1	4759.78940291	4.53	0.0353
C16 Sscd	1	8597.45280718	8.18	0.0050
C17 Hc Mbrs (Hcm)	1	570.84318060	0.54	0.4625
C18 Sc Mbrs (Scm)	1	2830.97336624	2.69	0.1033
C19 Hscm	1	432.54026260	0.41	0.5223
C20 Sscm	1	1962.47015087	1.87	0.1743

TABLE 5
AGGREGATE DEPENDENT VARIABLE
ALL INDEPENDENT VARIABLES (CONT'D.)

PARAMETER	ESTIMATE	T FOR H0: PARAMETER = 0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	-51.84071087	-0.64	0.5259	81.49820846
C2	7.59365857	2.36	0.0198	3.21548182
C3	1.17089798	2.68	0.0085	0.43737617
C4	0.18725530	2.24	0.0271	0.08368624
C5	17.53949417	1.20	0.2311	14.57102674
C6	-0.27027738	-0.54	0.5925	0.50359813
C7	-3.44589482	-1.94	0.0547	1.77588623
C8	1.63453583	0.94	0.3488	1.73773092
C9	11.16268559	1.31	0.1928	8.52313909
C10	-14.77737685	-1.33	0.1876	11.14957971
C11	1.58567582	1.04	0.2993	1.52122312
C12	-0.95391685	-0.62	0.5386	1.54671720
C13	-1.30351431	-1.21	0.2271	1.07362365
C14	1.15613561	1.16	0.2490	0.99798474
C15	0.62342484	2.13	0.0353	0.29288443
C16	-0.83139332	-2.86	0.0050	0.29062146
C17	-0.63209907	-0.74	0.4625	0.85749738
C18	2.96958238	1.64	0.1033	1.80897907
C19	0.55619514	0.64	0.5223	0.86680215
C20	2.20270037	1.37	0.1743	1.61160999

consideration of the other variables. The impact of the corresponding estimates is unclear, because they are pertinent only when the other variables are included. The direction of the estimate for the percentage of Democrats in the House is negative and contradicts our expectation for this variable. The direction of the estimate for the percentage of Democrats on the House subcommittees is positive and agrees with our expectations.

One other independent variable is noteworthy. The Senate committee membership variable has a large coefficient and significance levels slightly exceeding the 5 percent critical level. The decrease in F-value coupled with reduced significance levels in Type III SSs indicates the influence of multicollinearity, such that Senate committee membership has reduced correlative significance when fitted after all other variables.

b. All Non-partisan Variables (Table 6)

The exclusion of partisan variables in this regression provides a more refined look at the impact of structural variables in conjunction with the other variables. The question addressed is: Which has the greater effect: the number of committees and subcommittees which address legislation, or membership changes

within those committees and subcommittees? No statistical significance was generated,¹⁴ which would address this question of: Which has the greater effect?

Aside from the three independent variables with statistical significance addressed earlier, the independent variable, House subcommittee membership, has a large F-value with significance levels of 6.3 percent or better. Taken in conjunction with the estimates and t-tests, this would suggest that for each additional member on all subcommittees in the House, we would expect to see a 1.65 percent increase in spending in all functional areas. Stated in other terms, when every House subcommittee which addresses legislation in a functional area experiences a membership increase of one, we would expect to see a 1.65 percent increase in spending in that functional area. The direction of this effect suggests that potential benefits from specialization are offset by increased government spending that is hypothesized to result from increased membership.

Although they have no statistical significance when fitted before any other independent variable, the House and Senate committee variables as well as the Senate committee membership variable have large F-values (with improved significance levels of 6.1, 7.6, and 4.8 percent respectively) for Type III SSs. These increased significance levels indicate multicollinearity, such that their correlative significance with the independent variable is much more statistically significant when fitted after all other variables. The estimates show lower t-tests (1.79 to 2.0 percent) and significance levels closer to the 5 percent critical level (7.66 to 4.77 percent). The effect of the estimates (15.6 and 3.5 percent) for the variables House committees and Senate committee membership, respectively, is positive suggesting that the impact of potential specialization benefits is offset by the hypothesized increase in government spending caused by increased committee review and by increased committee membership respectively. The estimate for the variable (-19.0 percent), Senate committees, is negative suggesting that the Senate is not yet specialized enough in the number of committees it has reviewing legislation in the various functional areas.

3. Regressions which Account for Differences within the Dependent Variable

These regressions provide accountability for potential differences within the dependent variable due to the twelve functional areas in its makeup.

¹⁴House subcommittee membership has a greater than critical significance level (6.3 percent or better) and is addressed in the next paragraph.

TABLE 6
AGGREGATE DEPENDENT VARIABLE
ALL NON-PARTISAN VARIABLES

Dependent Variable: C1 = Percent Change Within Functional Area

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE
Model	12	32245.58119887	2687.13176657	2.45
Error	127	139478.26268355	1098.25403688	PR > F
Corrected Total	139	171723.84388242		0.0067

R-SQUARE	C.V.	ROOT MSE	C1 MEAN
0.187776	197.3335	33.13991607	16.79386429

SOURCE	DF	TYPE I SS	F VALUE	PR > F
C2 % chg GNP	1	4851.04618048	4.42	0.0376
C3 % chg Unemployment	1	6386.13326950	5.81	0.0173
C4 Public Laws (L)	1	6402.52855626	5.83	0.0172
C6 Pres Success % (PS)	1	2812.72433183	2.56	0.1120
C9 House Comms (Hc)	1	2160.72043880	1.97	0.1632
C10 Senate Comms (Sc)	1	874.12592393	0.80	0.3740
C13 H Subc (Hsc)	1	1152.54629672	1.05	0.3076
C14 S Subc (Ssc)	1	336.17700850	0.31	0.5811
C17 Hc Mbrs (Hcm)	1	0.60262472	0.00	0.9813
C18 Sc Mbrs (Scm)	1	2171.67575264	1.98	0.1621
C19 Hscm	1	3854.44160865	3.51	0.0633
C20 Sscm	1	1242.85920683	1.13	0.2894

SOURCE	DF	TYPE III SS	F VALUE	PR > F
C2 % chg GNP	1	7824.44468972	7.12	0.0086
C3 % chg Unemployment	1	8739.63764036	7.96	0.0056
C4 Public Laws (L)	1	5455.20942420	4.97	0.0276
C6 Pres Success % (PS)	1	714.10642874	0.65	0.4215
C9 House Comms (Hc)	1	3930.41834878	3.58	0.0608
C10 Senate Comms (Sc)	1	3499.56482659	3.19	0.0766
C13 H Subc (Hsc)	1	674.94712445	0.61	0.4345
C14 S Subc (Ssc)	1	299.67211721	0.27	0.6023
C17 Hc Mbrs (Hcm)	1	1623.63566617	1.48	0.2263
C18 Sc Mbrs (Scm)	1	4388.97097025	4.00	0.0477
C19 Hscm	1	5038.62583092	4.59	0.0341
C20 Sscm	1	1242.85920683	1.13	0.2894

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	-130.87986385	-2.84	0.0052	46.07580869
C2	6.38362620	2.67	0.0086	2.39161953
C3	0.92756076	2.82	0.0056	0.32881154
C4	0.15626445	2.23	0.0276	0.07011419
C6	0.29808235	0.81	0.4215	0.36966318
C9	15.62548168	1.89	0.0608	8.25972197
C10	-19.02500483	-1.79	0.0766	10.65783907
C13	-0.83002827	-0.78	0.4345	1.05878899
C14	0.48575218	0.52	0.6023	0.92991445
C17	-0.95536664	-1.22	0.2263	0.78573696
C18	3.50008376	2.00	0.0477	1.75084818
C19	1.64651904	2.14	0.0341	0.76870925
C20	-1.11617009	-1.06	0.2894	1.04923028

a. All Independent Variables (Table 7)

Aside from the three independent variables with statistical significance addressed earlier, the independent variable, Democratic percentage in the Senate subcommittees, closely parallels the values and findings of Table 5. The F-value and significance levels when fitted after all other variables are degraded, but still valid. The effect of the estimate remains negative as in Table 5, contradicting our expectation of the impact of increased Democratic percentages in Senate subcommittees.

The variable, Senate committee membership, has increased F-values, improved significance levels, and a higher estimate when compared with Table 5. The decrease in F-value when fitted after all other variables still reflects the influence of multicollinearity. Although a significance level still exceeds the critical 5 percent level (5.8 percent for Type I SSs), the effect of the estimate is positive, and would suggest that for every member increase on all committees in the Senate, we would expect to see a 6.3 percent increase in expenditures over all functional areas. Stated in terms of an increase in functional area, we would expect to see a 6.32 percent increase in billions of dollars spent in a functional area when all Senate committees which address legislation for that functional area experience a membership increase of one.

Of the remaining variables, only two with statistical significance show changes when compared with Table 5. Senate committees and House subcommittees show increased F values and high significance levels 2.6 and 6.0 percent respectively for Type III SSs, when compared with Table 5. These variables show improved correlative significance with the independent variable, when fitted after all other variables and when differences by functional area are accounted for.

Although some change is experienced when the regression is run to account for differences within the dependent variable due to the twelve functional areas, functional area is not statistically significant (see Source code 'C50 Dummy' in Tables 7 and 8), and estimates of the coefficient for each of the functional areas are not discussed. The only important change resulting from accounting for differences in the dependent variable is greater F-values with improved significance levels and a larger estimate for the independent variable, Senate committee membership.

b. All Non-partisan Variables (Table 8)

As in Table 6, this regression disregards partisan influence in focusing on whether membership changes or changes in the total number of committees and subcommittees which consider legislation in a given functional area have the greater

TABLE 7
ACCOUNTING FOR FUNCTIONAL AREA
ALL INDEPENDENT VARIABLES

Dependent Variable: C1 = Percent Change Within Functional Area

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE
Model	30	58138.14117295	1937.93803910	1.86
Error	109	113585.70270947	1042.07066706	PR > F
Corrected Total 139		171723.84388242		0.0110
R-SQUARE	C.V.	ROOT MSE	CI MEAN	
0.338556	192.2197	32.28111936	16.79386429	

SOURCE	DF	TYPE I SS	F VALUE	PR > F
C2 % chg GNP	1	4851.04618048	4.66	0.0332
C3 % chg Unemployment	1	6386.13326950	6.13	0.0148
C4 Public Laws (L)	1	6402.52855626	6.14	0.0147
C5 Pres Affil (PA)	1	1884.62328428	1.81	0.1815
C6 Pres Success % (PS)	1	1137.10201928	1.09	0.2985
C7 House Dems (Hd)	1	1425.68717595	1.37	0.2447
C8 Senate Dems (Sd)	1	238.83324688	0.23	0.6331
C9 H Comms (Hc)	1	2216.09762871	2.13	0.1476
C10 S Comms (Sc)	1	1013.87963144	0.97	0.3261
C11 Hcd	1	1745.35024674	1.67	0.1983
C12 Scd	1	374.97967148	0.36	0.5498
C13 H Subc (Hsc)	1	492.65783165	0.47	0.4932
C14 S Subc (Ssc)	1	574.46049209	0.55	0.4594
C15 Hscd	1	770.76390269	0.74	0.3917
C16 Sscd	1	7303.26081412	7.01	0.0093
C17 Hc Mbrs (Hcm)	1	18.16512444	0.02	0.8952
C18 Sc Mbrs (Scm)	1	3823.24127513	3.67	0.0581
C19 Hscm	1	3037.90291052	2.92	0.0906
C20 Sscm	1	1962.47015087	1.88	0.1728
C50 Dummy	11	12478.95776044	1.09	0.3771

SOURCE	DF	TYPE III SS	F VALUE	PR > F
C2 % chg GNP	1	4732.47752668	4.54	0.0353
C3 % chg Unemployment	1	6630.20590696	6.36	0.0131
C4 Public Laws (L)	1	3758.78657763	3.61	0.0602
C5 Pres Affil (PA)	1	1680.75599684	1.61	0.2068
C6 Pres Success % (PS)	1	480.19990717	0.46	0.4987
C7 House Dems (Hd)	1	3552.48796999	3.41	0.0676
C8 Senate Dems (Sd)	1	1661.96206101	1.59	0.2093
C9 H Comms (Hc)	1	1038.35168168	1.00	0.3204
C10 S Comms (Sc)	1	5285.43746911	5.07	0.0263
C11 Hcd	1	1105.09165445	1.06	0.3054
C12 Scd	1	814.96491381	0.78	0.3785
C13 H Subc (Hsc)	1	3772.81621767	3.62	0.0597
C14 S Subc (Ssc)	1	1673.86088895	1.61	0.2077
C15 Hscd	1	2112.89096950	2.03	0.1573
C16 Sscd	1	4526.93410047	4.34	0.0395
C17 Hc Mbrs (Hcm)	1	718.21996400	0.69	0.4082
C18 Sc Mbrs (Scm)	1	5372.94307927	5.16	0.0251
C19 Hscm	1	969.81316266	0.93	0.3368
C20 Sscm	1	3225.30263620	3.10	0.0813
C50 Dummy	11	12478.95776044	1.09	0.3771

TABLE 7
ACCOUNTING FOR FUNCTIONAL AREA
ALL INDEPENDENT VARIABLES (CONT'D.)

PARAMETER	ESTIMATE	T FOR H0: PARAMETER = 0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	-44.05271667 B	-0.44	0.6642	101.19520438
C3	7.01467615	2.13	0.0353	3.29163697
C4	1.12877541	5.52	0.0131	0.44749957
C5	0.16354768	1.90	0.0602	0.08611308
C6	18.86836077	1.27	0.2068	14.85697602
C7	-0.35542487	-0.68	0.4987	0.52358279
C8	-3.47630612	-1.85	0.0676	1.88278310
C9	2.29404399	1.26	0.2093	1.81651829
C10	16.54082038	1.00	0.3204	16.57041841
C11	-45.84694660	-2.25	0.0263	20.35722295
C12	1.65721458	1.03	0.3054	1.60926729
C13	-1.42434335	-0.88	0.3785	1.61062253
C14	-3.32053712	-1.90	0.0597	1.74511519
C15	2.62428423	1.27	0.2077	2.07061700
C16	0.61630775	1.42	0.1573	0.43282035
C17	-0.67398118	-2.08	0.0395	0.32336593
C18	-0.95393315	-0.83	0.4082	1.14904699
C19	6.31508393	2.27	0.0251	2.78113194
C20	-1.37761344	-0.96	0.3368	1.42801221
C50	3.17108351	1.76	0.0813	1.80248238
1	-13.61094717 B	-0.40	0.6922	34.28541338
2	-29.23995486 B	-0.80	0.4273	36.69951628
3	18.32898935 B	0.74	0.4609	24.77185621
4	-6.22165837 B	-0.19	0.8463	32.02773194
5	2.64716297 B	0.08	0.9355	32.65856650
6	57.27121412 B	2.41	0.0178	23.80451521
7	8.29359587 B	0.46	0.6476	18.09259823
8	45.44596978 B	2.01	0.0471	22.63324107
9	4.30179972 B	0.20	0.8453	21.99594317
10	-21.44210090 B	-0.64	0.5242	33.55870437
11	-34.13892514 B	-1.05	0.2939	32.36546758
12	0.00000000 B			
CLASS				
LEVELS				
VALUES				
Dummy Variable:	C50	12	1 2 3 4 5 6 7 8 9 10 11 12	

effect on the dependent variable. But here, the differences in the dependent variable due to functional areas are accounted for.

Aside from the three independent variables with statistical significance addressed earlier, no other independent variable has statistical significance. Differences in the dependent variable due to functional areas are not statistically significant. Both of the variables, Senate committees and Senate committee members, have low significance levels for Type I SSs, but large F-values with improved significance levels of 0.5 and 0.85 percent respectively for Type III SSs. These variables are multicollinear, showing improved correlative significance with the independent variable when fitted after all other variables.

TABLE 8
ACCOUNTING FOR FUNCTIONAL AREA
ALL NON-PARTISAN VARIABLES

Dependent Variable: C1 = Percent Change Within Functional Area

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE
Model	23	47131.58740654	2049.19945246	1.91
Error	116	124592.25647589	1074.07117652	PR > F
Corrected Total	139	171723.84388242		0.0137

R-SQUARE	C.V.	ROOT MSE	C1 MEAN
0.274462	195.1488	32.77302514	16.79386429

SOURCE	DF	TYPE I SS	F VALUE	PR > F
C2 % chg GNP	1	4851.04618048	4.52	0.0357
C3 % chg Unemployment	1	6386.13326950	5.95	0.0163
C4 Public Laws (L)	1	6402.52855626	5.96	0.0161
C6 Pres Success % (PS)	1	2812.72433183	2.62	0.1083
C9 House Comms (Hc)	1	2160.72043880	2.01	0.1588
C10 Senate Comms (Sc)	1	874.12592393	0.81	0.3689
C13 H Subc (Hsc)	1	1152.54629672	1.07	0.3024
C14 S Subc (Ssc)	1	336.17700850	0.31	0.5769
C17 Hc Mbrs (Hcm)	1	0.60262472	0.00	0.9811
C18 Sc Mbrs (Scm)	1	2171.67575264	2.02	0.1577
C19 Hscm	1	3854.44160865	3.59	0.0607
C20 Sscm	1	1242.85920683	1.16	0.2843
C50 Dummy	11	14886.00620766	1.26	0.2560

SOURCE	DF	TYPE III SS	F VALUE	PR > F
C2 % chg GNP	1	7379.81170503	6.87	0.0099
C3 % chg Unemployment	1	7938.85507221	7.39	0.0076
C4 Public Laws (L)	1	4536.41353846	4.22	0.0421
C6 Pres Success % (PS)	1	583.66357754	0.54	0.4625
C9 House Comms (Hc)	1	456.26211728	0.42	0.5158
C10 Senate Comms (Sc)	1	8815.45782158	8.21	0.0050
C13 H Subc (Hsc)	1	3295.28917940	3.07	0.0825
C14 S Subc (Ssc)	1	931.48711027	0.87	0.3537
C17 Hc Mbrs (Hcm)	1	1139.19722199	1.06	0.3052
C18 Sc Mbrs (Scm)	1	7703.15353787	7.17	0.0085
C19 Hscm	1	14.56563047	0.01	0.9075
C20 Sscm	1	195.33553320	0.18	0.6706
C50 Dummy	11	14886.00620766	1.26	0.2560

TABLE 8
ACCOUNTING FOR FUNCTIONAL AREA
ALL NON-PARTISAN VARIABLES (CONTD.)

PARAMETER	ESTIMATE	T FOR H0: PARAMETER=0	PR > T	STD ERROR OF ESTIMATE
INTERCEPT	-104.21706042 B	-1.51	0.1332	68.91297238
C2	6.54008227	2.62	0.0099	2.49503764
C3	0.93966116	2.72	0.0076	0.34562796
C4	0.14961316	2.06	0.0421	0.07279977
C6	0.29025490	0.74	0.4625	0.39374477
C9	10.46261164	0.65	0.5158	16.05274957
C10	-52.49325148	-2.86	0.0050	18.32304167
C13	-3.07748517	-1.75	0.0825	1.75697561
C14	1.80074620	0.93	0.3537	1.93366222
C17	-0.95684554	-1.03	0.3052	0.92909241
C18	6.80086832	2.68	0.0085	2.53949066
C19	-0.14308892	-0.12	0.9075	1.22873404
C20	0.63373757	0.43	0.6706	1.48605663
C50	-31.44945295 B	-0.96	0.3383	32.70598566
1	-40.23751717 B	-1.12	0.2631	35.77760292
2	5.47107592 B	0.23	0.8211	24.14162433
3	-17.45997356 B	-0.56	0.5779	31.28688508
4	-9.35852952 B	-0.29	0.7691	31.80821584
5	56.28293719 B	2.53	0.0126	22.21005591
6	3.54190683 B	0.21	0.8337	16.83469258
7	34.60465730 B	1.72	0.0876	20.08940349
8	11.48830864 B	0.53	0.5938	21.47830089
9	-38.87321815 B	-1.28	0.2042	30.44627270
10	-50.45911582 B	-1.80	0.0747	28.05988106
11	0.00000000 B	.	.	.
12	0.00000000 B	.	.	.

Dummy Variable: CLASS C50

LEVELS 12 1 2 3 4 5 6 7 8 9 10 11 12

VALUES

C. SUMMARY

The regressions results were compared to identify similar findings, then reviewed separately to determine peculiarities with respect to the purpose of the regression.

In the general comparison, three independent variables, the percent change in GNP, the percent change in unemployment, and the number of public laws passed within a given session, were the only variables with consistently high F-values and significance levels of 5 percent or better for all regressions. Multicollinearity was evident as either increased or decreased F-values for Type III SSs indicated an improved or degraded correlative significance with the dependent variable when fitted after all other variables. Since no statistical significance resulted from accounting for differences in the independent variable resulting from the twelve functional areas (see

Source code 'C50 Dummy' in Tables 7 and 8), no estimates were generated for the individual functional areas.

When partisan variables were included, the variable Democratic percentage in the Senate subcommittee had high F-values and significance levels of 5 percent or better in both regressions. The Senate committee membership variable also had high F-values, but with significance levels of 10 percent and better in both regressions.

When partisan variables were excluded, no variables had better than a 5 percent significance level. The variable House subcommittee membership had high F-values and significance levels better than 6.5 percent only when the differences in the dependent variable resulting from functional areas were not accounted for.

V. CONCLUSIONS AND RECOMMENDATIONS

A. PURPOSE REVISITED

The purpose of this thesis was to examine the role of the legislative structure in explaining the growth of federal government spending. The research addressed a number of structurally related questions.

1. Does a change in membership or a change in the number of committees and subcommittees responsible for a specific functional area have any effect on the overall growth in federal expenditures?
2. Does partisanship have an effect on spending?
3. Does increased specialization lead to greater spending or to better monitoring of agency activities, *ceteris paribus*?
4. Is the net effect of increased membership in committees and subcommittees:
 - a. reduced expenditures because of lower median member preferences, or
 - b. increased expenditures because of an improved ability to represent special interest groups?

B. CONCLUSIONS

The overall tests of the calculated F-value (in all regressions) indicate a rejection of the null hypothesis.¹⁵ Although correlation is evident in the aggregate, it does not support the structural hypotheses of the thesis, because both structural and non-structural variables are included.

Three independent variables (unemployment, real national income, and public laws passed) demonstrated consistently high F-values and significance levels of 5 percent or better over all regressions. Interpretation and discussion of the estimates for these non-structural variables does not address the structural hypotheses of this thesis.

Non-partisan structural variables demonstrated no statistical significance over all of the regressions. However, when partisan variables were included, the Democratic percentage in Senate subcommittees had very high F-values of 6.95 and 8.18 percent with significance levels of less than 1.0 percent. The estimate for this variable is negligible but negative (-.83 Percent), which disagrees with the expectation that increases in Democratic percentages should yield corresponding increases in federal expenditures. Five of the six partisan variables show no statistical significance.

¹⁵The null hypothesis states that there is zero correlation between the aggregate of the independent variables and the dependent variable.

Consequently, with the exception of this one partisan variable, we conclude that *structural variables, including partisan variables, do not play a significant role in explaining the growth in federal spending.*

Specialization, as it applies to Congressional structure, advocates increasing the number of committees and subcommittees, increasing their membership, and narrowing the scope of their legislative review to improve monitoring of expenditures and agency activities. Committees, subcommittees, and members become more specialized as their numbers increase and the scope of their legislative review narrows. The results of this research would lead us to conclude that *specialization does not provide better monitoring of agency activities and federal spending, nor does it lead to increased expenditures.*

The portion of the results that addresses membership issues was equally void of statistical significance. Consequently, we can conclude that *increases in membership have no significant effect on expenditures.* The question of whether lower median member preferences reduce expenditures or are offset by the increased membership's ability to represent special interest groups is not answerable given the results of this analysis.

C. RECOMMENDATIONS

The research successfully points out the *statistical insignificance* of the role of the legislative structure, including partisanship, in explaining the growth of federal government spending. Further research in this regard, e.g. inclusion of the six functional expenditure areas not included in this research, is not recommended other than to substantiate these findings.

The chapter on literature review introduced some observations which could provide interesting related research areas. For example, a member's procedural expertise and budgetary perspective could be considered by comparison of various chairmanships' individual legislative records, i.e. bills introduced and passed as well as their associated expenditure levels. Research questions to be addressed could include:

- Does procedural expertise significantly influence the passage of bills introduced by a member?
- If a member's political career is measured in part by the size of the expenditures associated with the legislation which he has introduced, is there a relationship between the power of the committee or subcommittee which he chairs and the size of the expenditures associated with legislation which he introduced? A related question has to do with the relationship of the time required to achieve appointment to chairmanship from freshman year with the dollar value of expenditures associated with introduced legislation.

Another example might be to focus on the influence of party leadership in partisan voting. This could be approached in two ways. The first method could compare passage and dollar value of introduced legislation with a member's partisan voting record. The second method could compare the power of chairmanships and partisan voting records among members with chairmanships. The second method could also look at the timeframes from freshman year to chairmanship in relation to partisanship voting records.

Regardless of the area or manner, further research is essential to identify aspects of the political process which have statistically significant bias toward high expenditure growth. Identification of these aspects is a prerequisite for generating adequate means to control expenditure growth.

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